

# Ebola

## The American Experience

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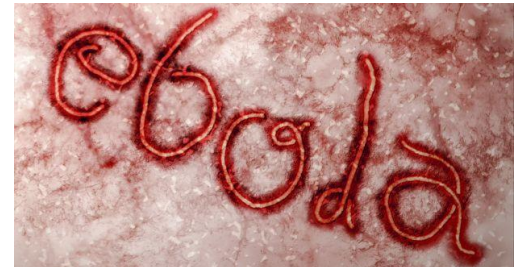
Epidemiologists

Office Epidemiology and Prevention Services

Regional Ebola Trainings

June 25, 2015

Wheeling



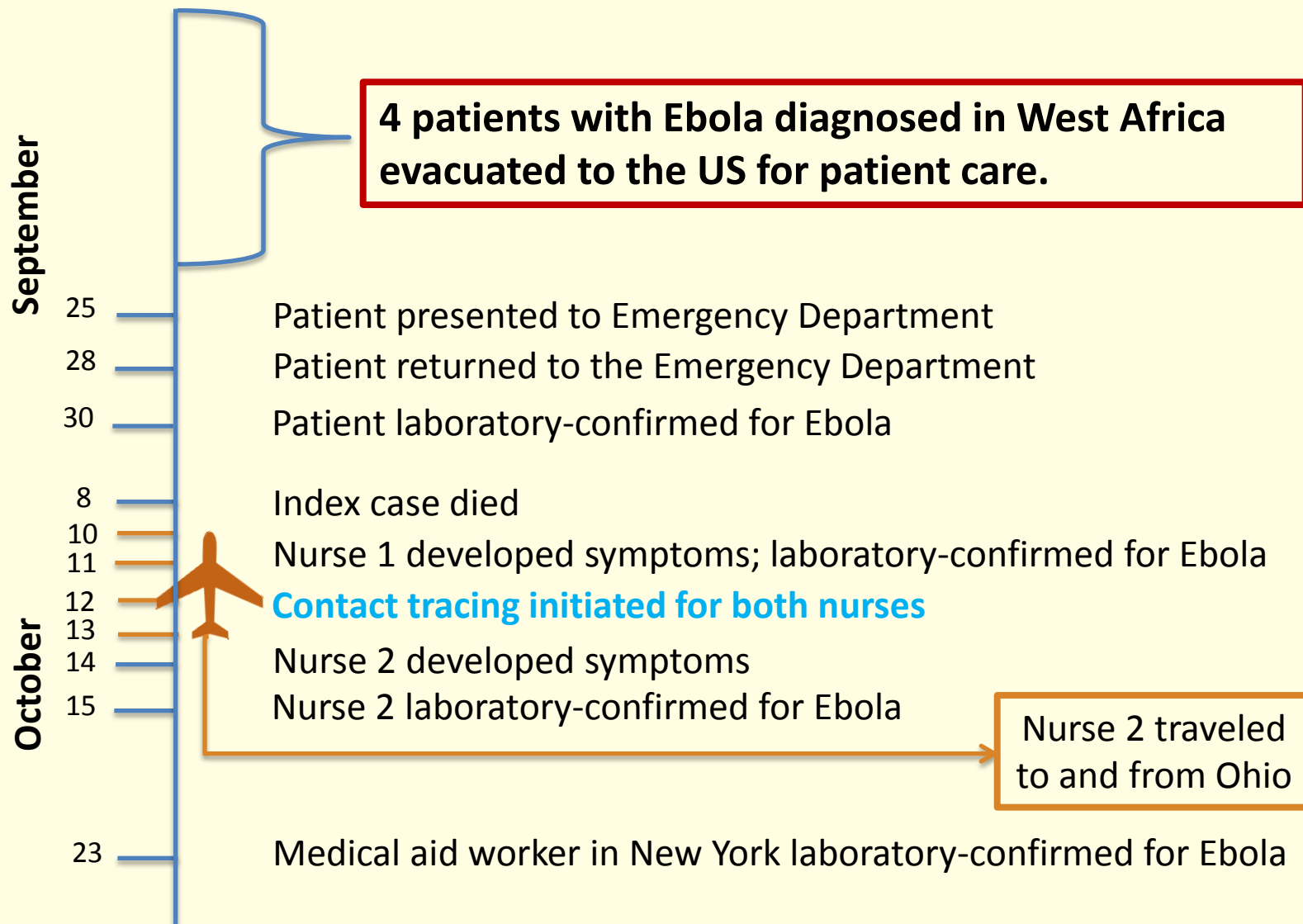
# Objectives

1. Know the experience with imported cases of Ebola in the US.
2. Understand the influence of fear on public health activities in the US.
3. Understand US prevention and control strategies as articulated by the CDC.
4. Know scientific and other resources available in WV.

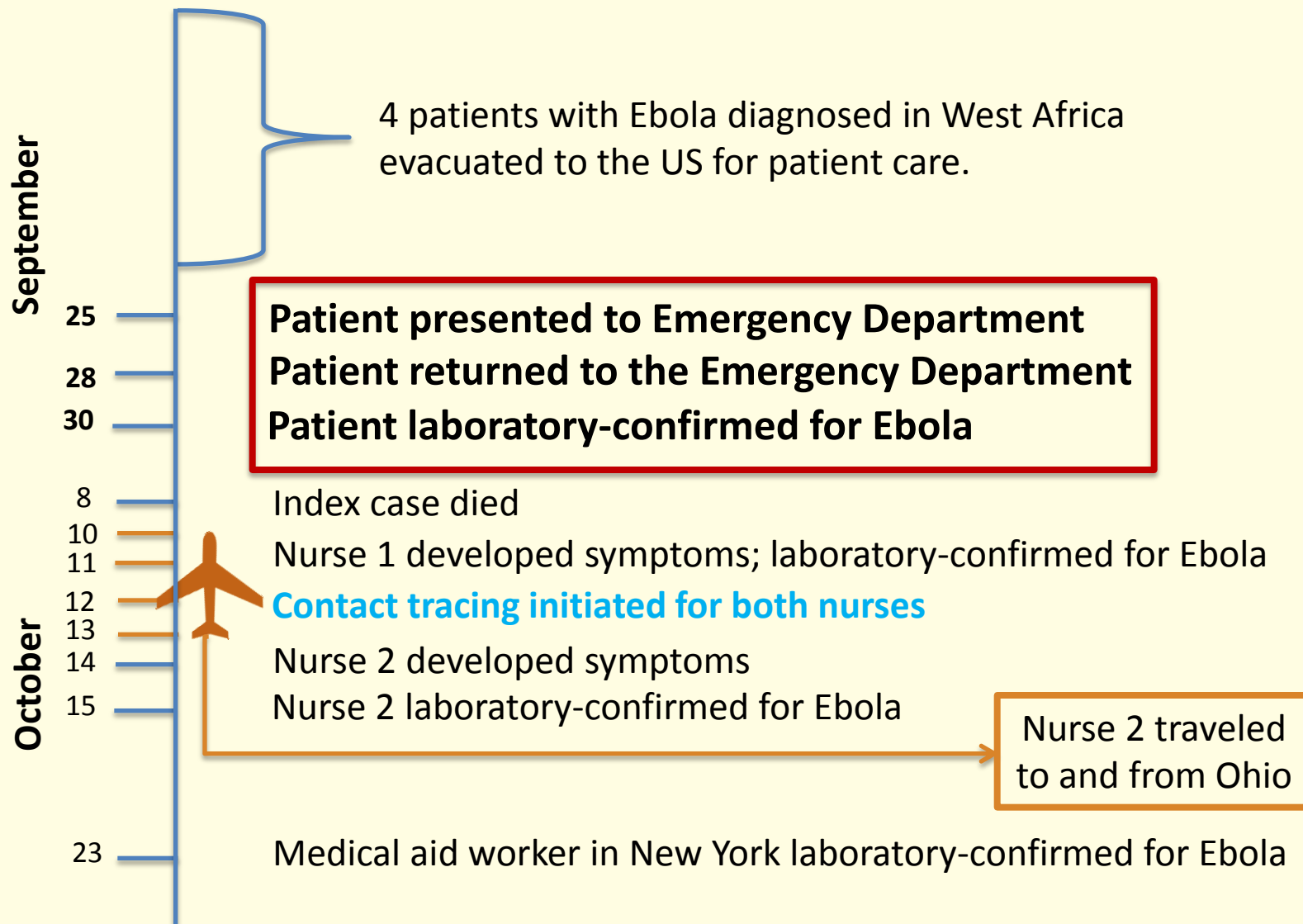
# Let's Put It Into Perspective



# Timeline of Events



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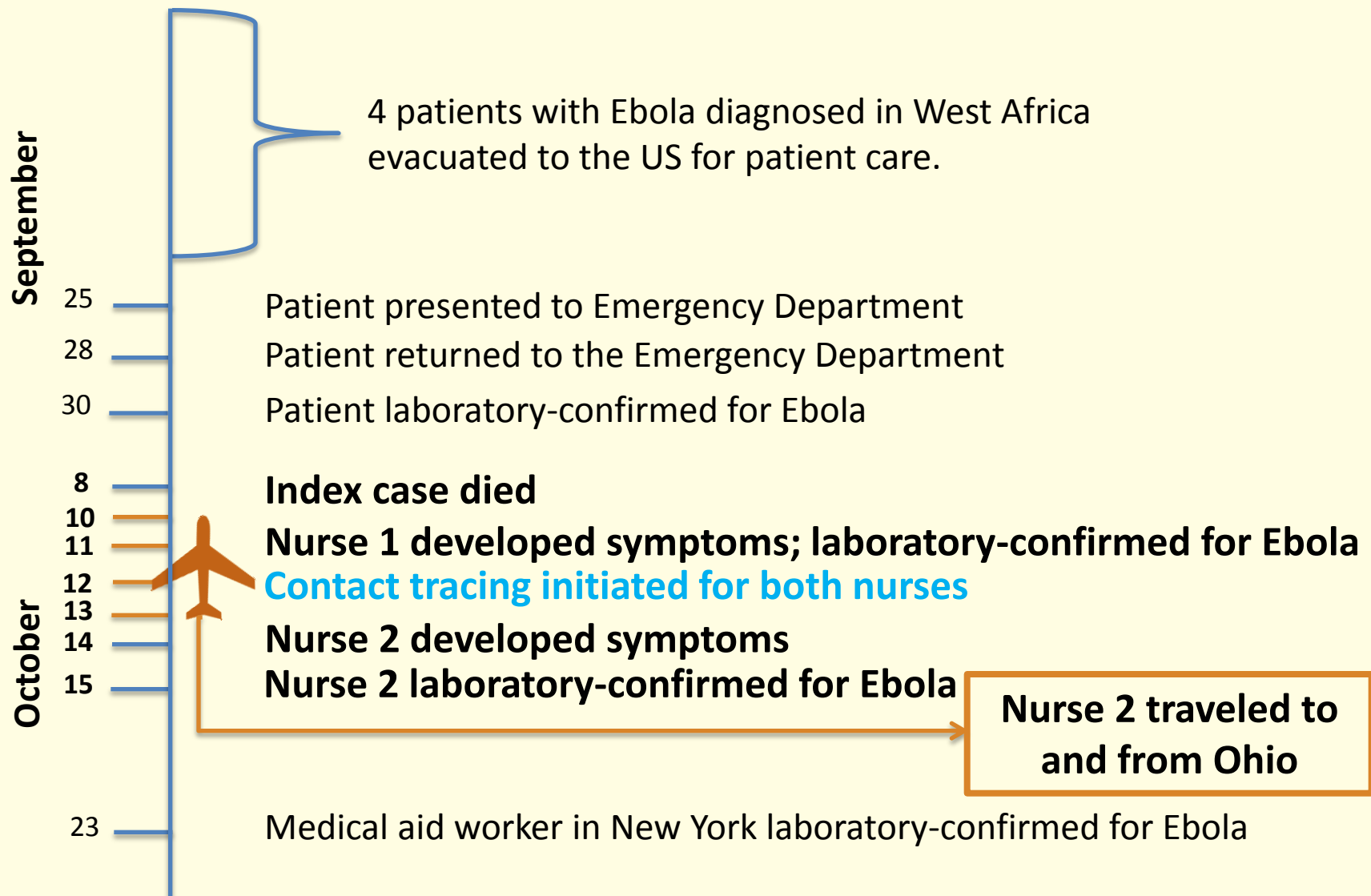


# Initial Contact Investigation

- 48 contacts identified/monitored close unprotected contacts
  - ✓ Had exposure to the patient
  - ✓ Potentially contaminated environment
  - ✓ Patient specimens without proper Personal Protective Equipment
- Of the 48 contacts:
  - ✓ 17 Community (6 household)
  - ✓ 10 Emergency Medical Services
  - ✓ 21 Healthcare workers
- Index case died October 8



# Timeline of Events



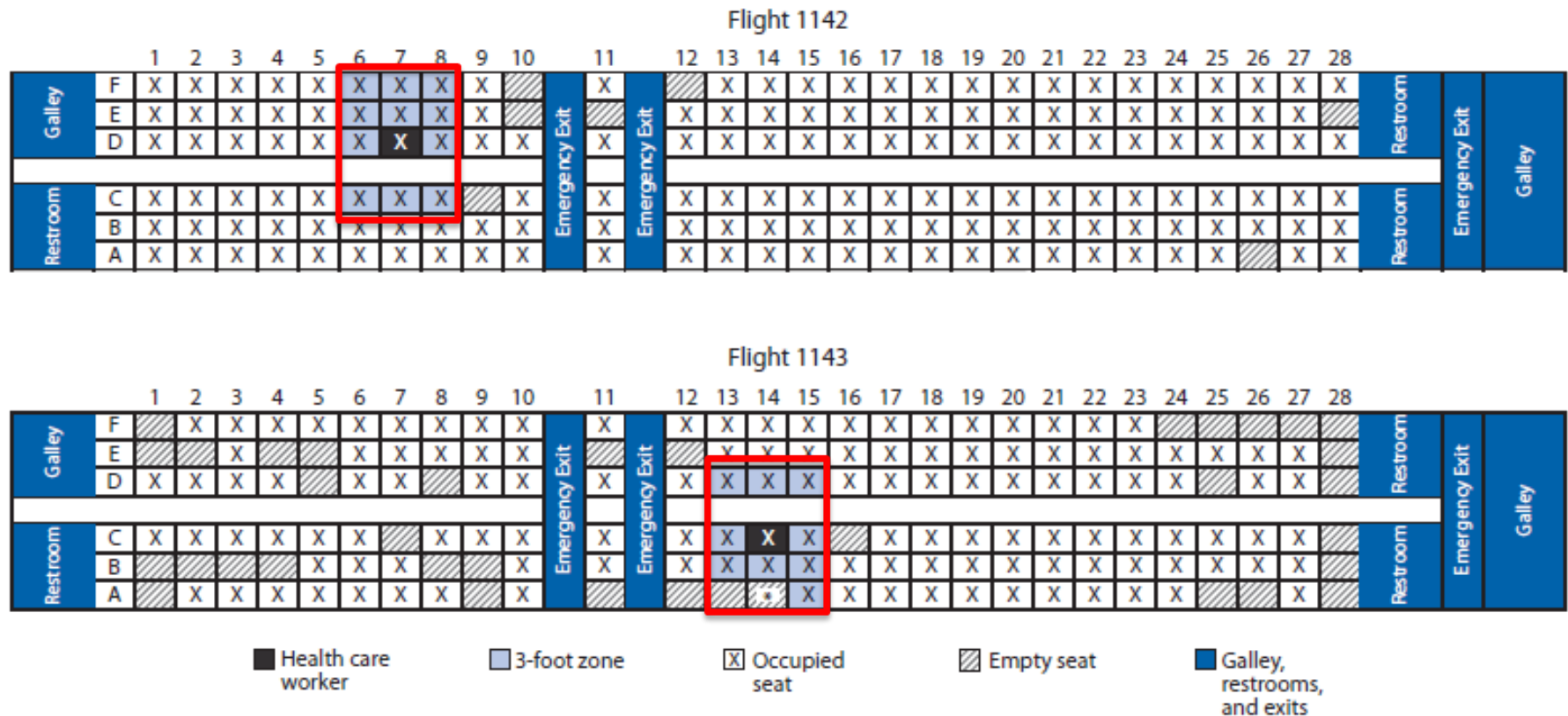
# Contact Tracing for Cases 2 and 3

- October 12 Contact tracing began
  - ✓ Had exposure to any 3 Ebola cases
  - ✓ Exposure to patient specimens
  - ✓ Potentially contaminated environment
- Of the 150 contacts:
  - ✓ 147 healthcare workers
  - ✓ 3 household contacts
- Cases 2 and 3 fully recovered
- All 150 contacts completed their 21 day monitoring-no additional cases found



- Case 3 traveled by commercial airline
  - ✓ October 10-13
  - ✓ Dallas, Texas to Cleveland, Ohio
  - ✓ Contact investigation for airlines
- Airline investigation
  - ✓ Brief interview to determine risk
  - ✓ Previous recommendations more conservative

# Seating Charts for Flights



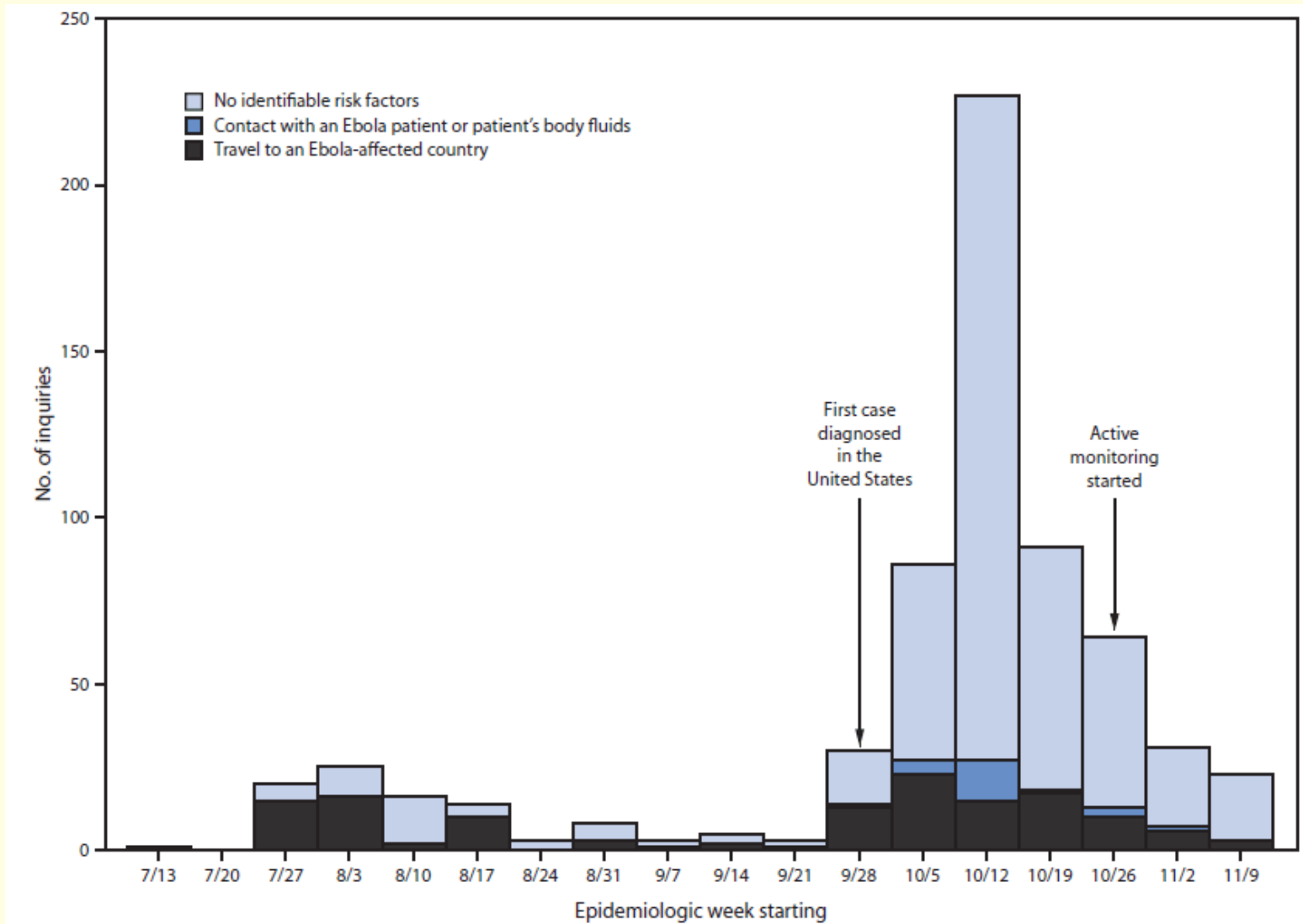
# Categorization of Contacts

	<b>Some Risk (3 foot zone)</b>	<b>Uncertain Risk (outside 3 foot zone)</b>
<b>Interview</b>	<b>X</b>	<b>X</b>
<b>Twice Daily Monitor for Fever and Symptoms</b>	<b>X</b> (report daily to Local Health Department)	<b>X</b> (only report symptoms)
<b>Quarantine</b>	<b>X</b>	
<b>Do Not Board List</b>	<b>X</b>	

What do you think are the lessons learned from this Ebola virus disease cluster in the United States?

- Identify patients with Ebola at presentation to minimize potential exposures.
- Rapidly identify contacts of Ebola patients and evaluate their level of exposure risk.
- Assess infection control practices (rigorous and repeat training)
- Develop protocols to safely transport suspected Ebola patients to hospitals and safely evaluate these patients within a hospital.
- Designate facilities to care for patients with confirmed Ebola.

# Inquires to CDC by Epidemiologic Risk Factor



# Entry Screening Program





WEST VIRGINIA  
Department of  
**Health & Human  
Resources**  
BUREAU FOR PUBLIC HEALTH

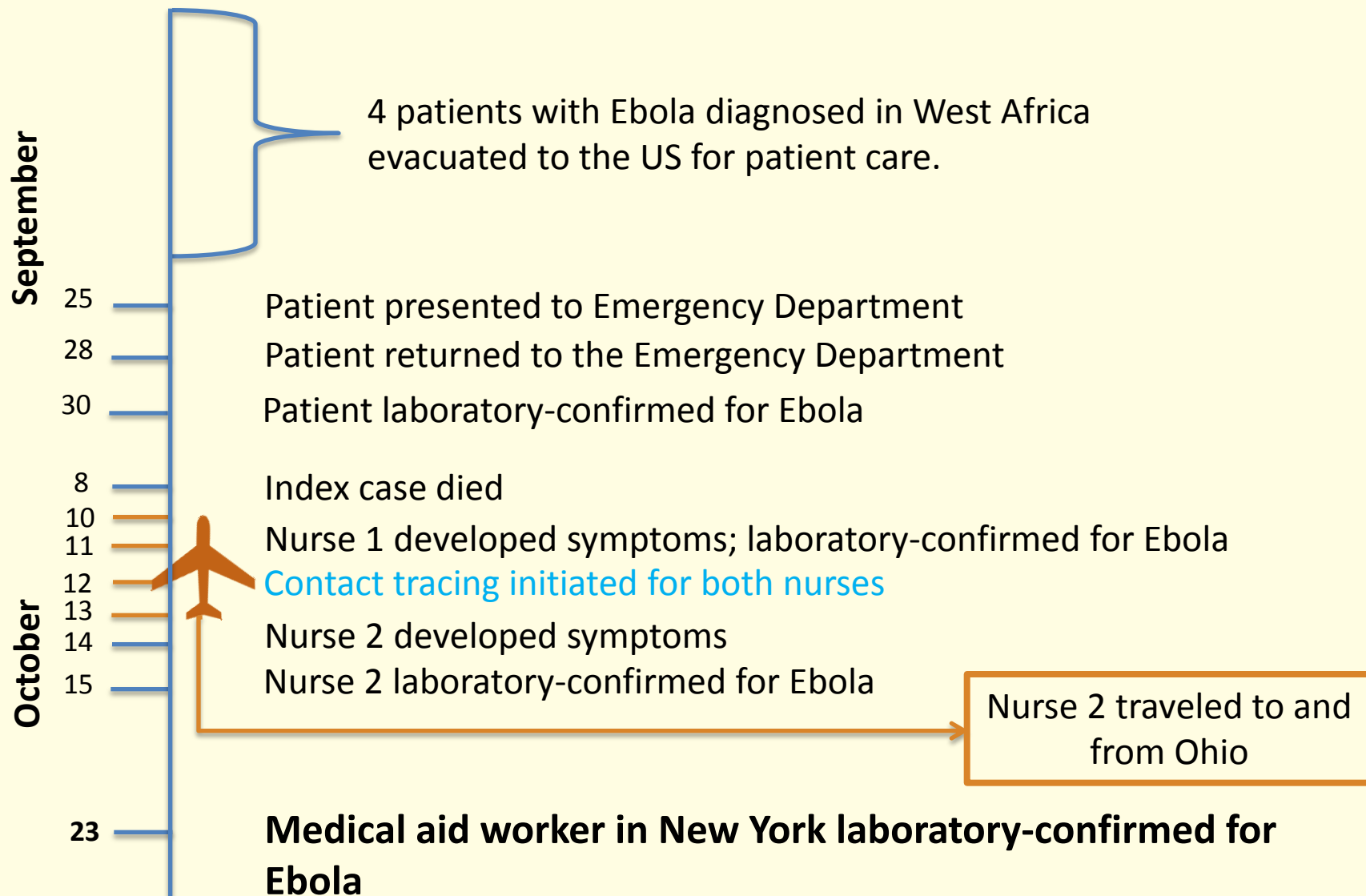


# Assessment of Risk Among Travelers

## Travelers Screened by CDC at US Airports, October 11-November 10, 2014 (N=1,986)

<b>Risk Category</b>	<b>Number of Travelers</b>
<b>High</b>	0
<b>Some</b>	16
<b>Low (but not zero)</b>	70
<b>Total</b>	86

# Timeline of Events



# CDC Strategies for Prevention and Control

1. Returned traveler screening and monitoring
2. Early recognition and isolation
3. Appropriating infection control and Personal Protective Equipment
  - Emergency Medical Services
  - Healthcare facilities
  - Mortuary services
4. Laboratory diagnosis
5. Contact tracing and contact surveillance

## MMWR Ebola Reports

[http://www.cdc.gov/mmwr/ebola\\_reports.html](http://www.cdc.gov/mmwr/ebola_reports.html)

## CDC website

<http://www.cdc.gov/vhf/ebola/>

[www.dide.wv.gov](http://www.dide.wv.gov)

## WHAT IS EBOLA?

Ebola virus disease is a serious illness caused by one of four strains of virus: *Zaire*, *Tai Forest*, *Sudan*, and *Bundibugyo*. Ebola can cause disease in humans and other mammals.

For more frequently asked questions, click [here](#).



Image from bbc.co.uk





INFORMATION FOR  
THE PUBLIC

INFORMATION FOR  
HEALTH  
PROFESSIONALS

INFORMATION FOR  
LOCAL HEALTH

## Is it Flu or Ebola?



Flu (Influenza)	Ebola
 <p>The flu is common and causes respiratory illness caused by the virus. The flu often comes on suddenly.</p> <p>It can cause mild to severe illness, and complications can lead to death.</p>	 <p>Ebola is a rare and deadly disease caused by infection with an Ebola virus.</p>
How Flu Germs Are Spread	How Ebola Germs Are Spread
 <p>The flu is spread mainly by droplets made when people breathe, talk, cough, or sneeze. It is more common in crowded places, but it is less common.</p> <p>People with flu can spread the virus before they start feeling sick.</p>	 <p>Ebola can be spread by direct contact with blood or body fluids from:</p> <ul style="list-style-type: none"> <li>• A person who is sick or who died of Ebola.</li> <li>• Objects like needles that have been in contact with blood or body fluids of a person with Ebola.</li> </ul> <p>Ebola can spread in other ways.</p>

CLICK [HERE](#) to view an infographic identifying the differences between Ebola and the Flu.

Click Here for Resources for  
Parents, Schools, and  
Pediatric Healthcare Professionals

Information related to children and Ebola. Includes information from the American Academy of Pediatrics on how to discuss Ebola with children and guidance for pediatricians and OB/GYNs.

**PLEASE FILL OUT THE  
“THE AMERICAN EXPERIENCE”  
PRESENTATION EVALUATION.**

**THANK YOU!**



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